

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

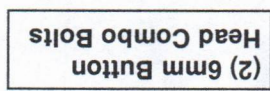
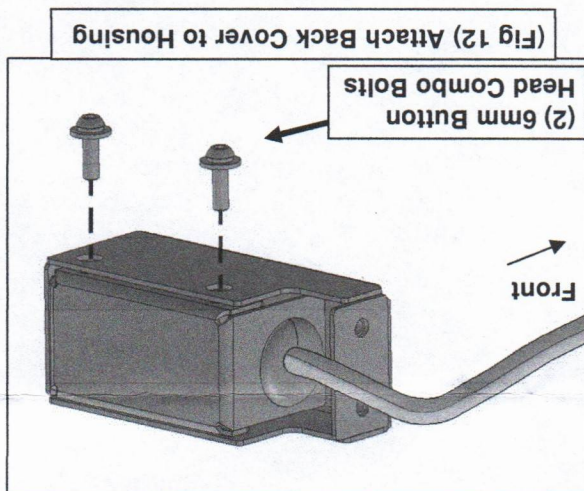
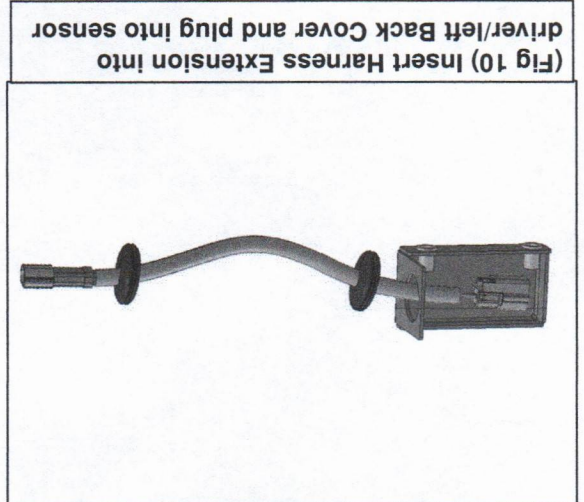
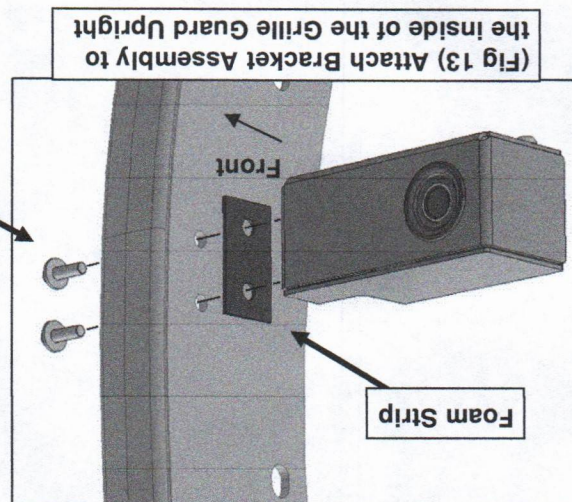
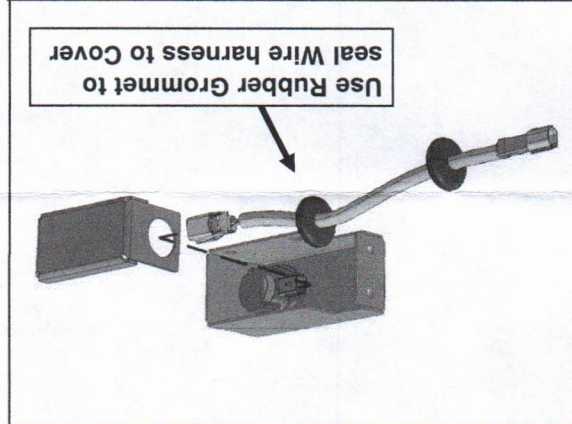
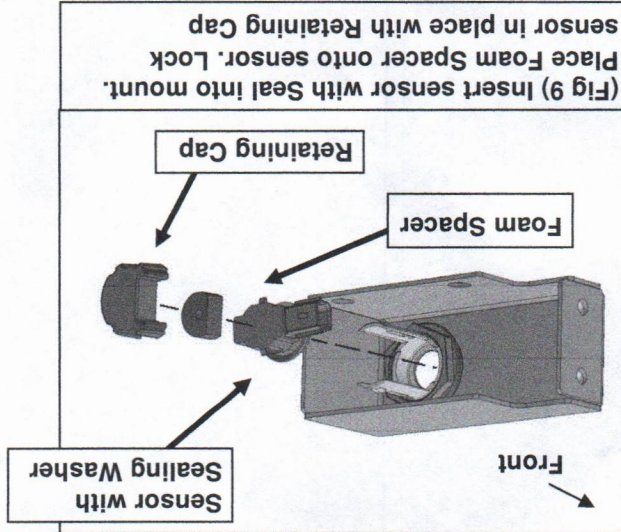
to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

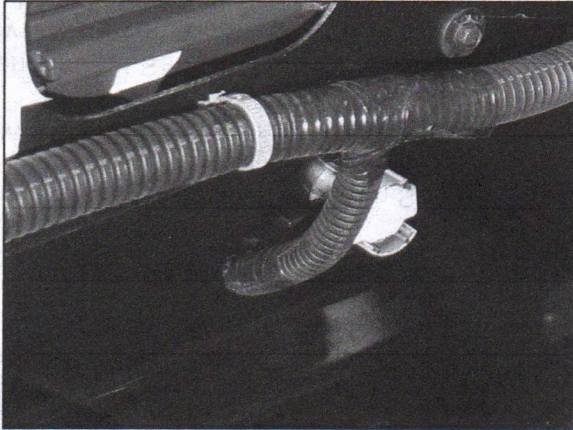
to be used for the purpose of the
to be used for the purpose of the

to be used for the purpose of the
to be used for the purpose of the

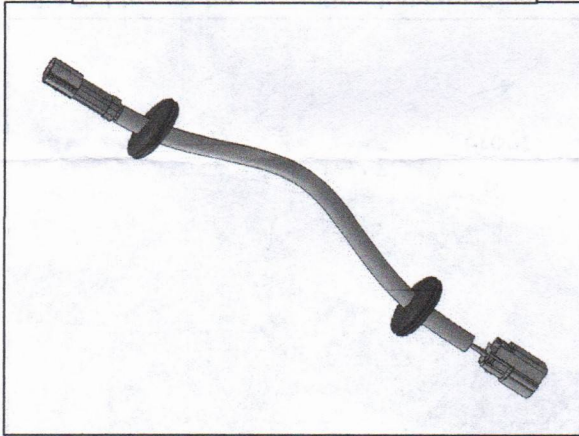
Driver/Left Side Installation Pictured



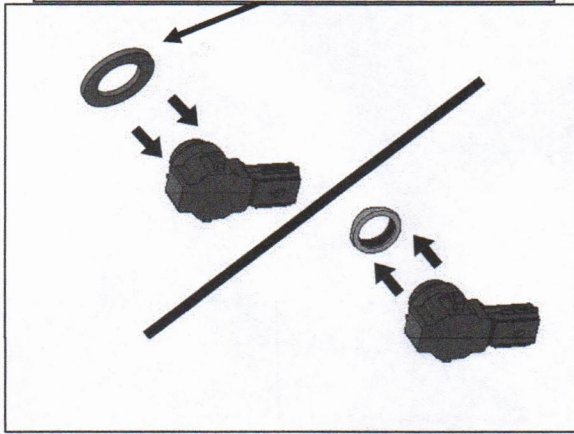
Driver/Left Side Installation Pictured



(Fig 4) Unplug and remove OE center sensors from the back of the bumper (example only)



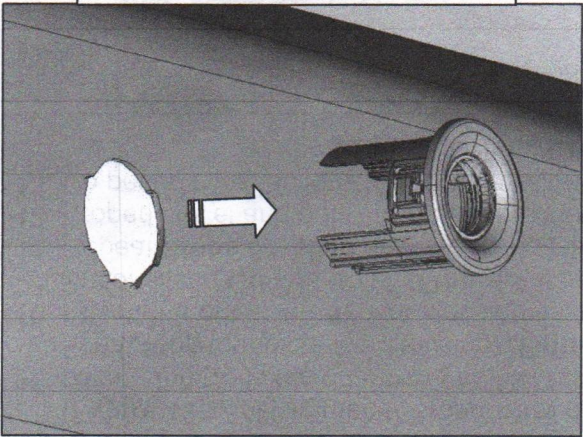
(Fig 6) Slide (2) Rubber Grommets onto Wire Harness Extension



(Fig 8) Remove seal from sensor. Slide large Foam Seal over end of sensor



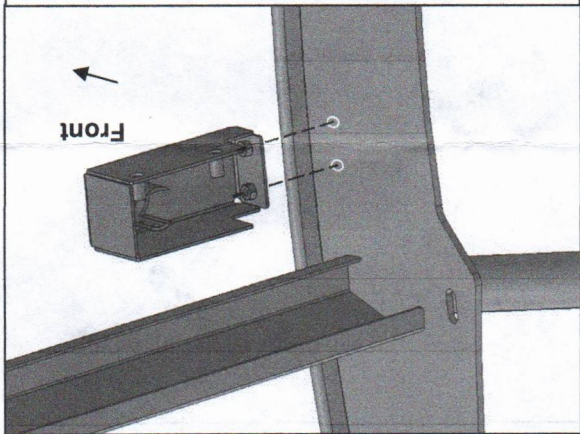
(Fig 7) Push Rubber Grommet on Harness into sensor hole (Bumper used for Example)



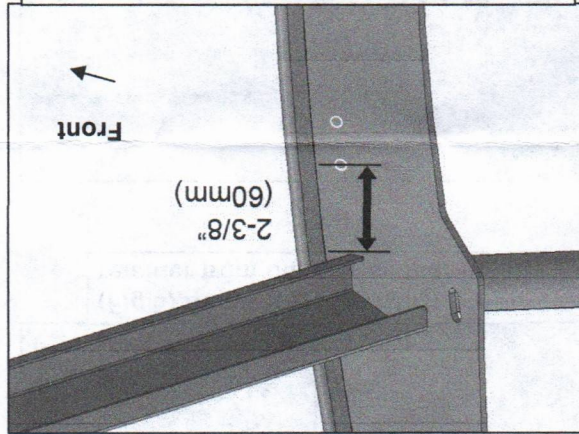
(Fig 5) Remove OE sensor retainer from bumper sensor hole

6. Select (1) sensor. Remove the silicone seal from the sensor, (Figure 8). Slide the provided (1) Foam Sealing Washer over the front of the sensor. Select the Driver/left Sensor Housing. Push the sensor into the sensor mount on the back of the Housing, (Figure 9). Attach the Foam Spacer to the end of the harness through the hole in the Cover and plug the end of the Harness into the sensor, (Figure 11).
7. Push the Rubber Grommet into the hole in the Cover.
8. Attach the Cover to the Sensor Housing with the included (2) 6mm x 20mm Button Head Combo Bolts, (Figure 12). Fully tighten this hardware only at this time.
9. Locate the (2) holes on the driver/left Grille Guard Upright. Select (1) Adhesive Foam Strip. Attach the Foam Strip to the Sensor Housing, (Figure 13).
10. Attach the driver/left Sensor Housing assembly to the inside of the Grille Guard Upright with (2) 6mm Button Head Combo Bolts, (Figure 13).
11. Repeat Steps 6—10 to assemble and install the passenger/right Sensor Housing assembly.
12. Properly level and adjust the Sensor Housing assembly and tighten all hardware.
13. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

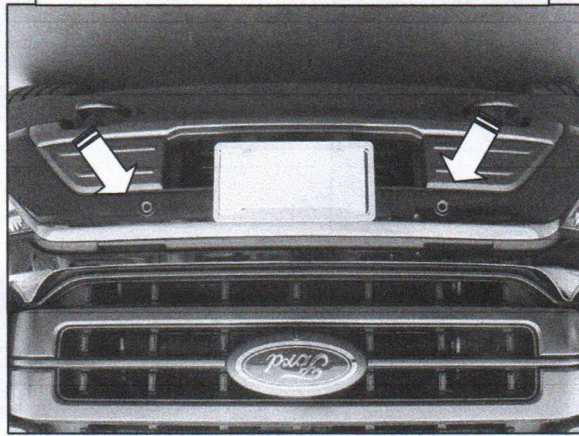
Driver/Left Side Installation Pictured



(Fig 2) Line up top mounting hole on Cover with reference line. Mark upright with (2) 5/16" holes through each upright location of mounting holes for drilling. Drill



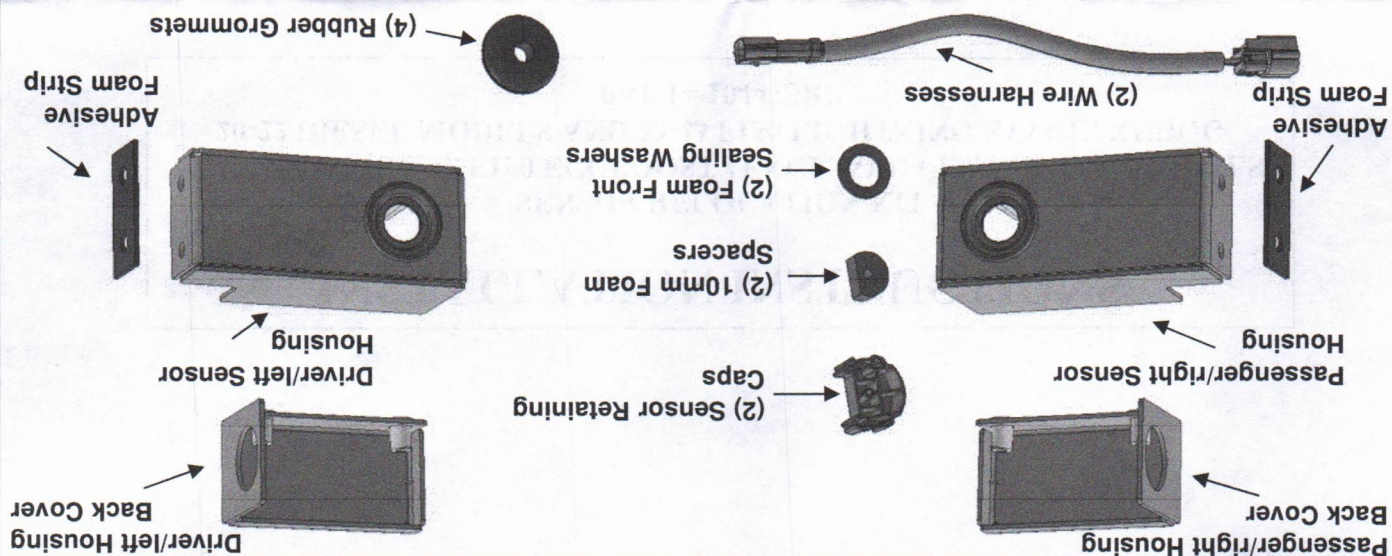
(Fig 1) Measure a downward distance of 2-3/8" (60mm) from the bottom of the crossbar. Place mark on inside of upright



(Fig 3) Remove bumper if necessary to remove both center sensors (arrows).

1. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. DRILLING MAY BE

2. Determine if the Grille Guard Uprights are equipped with (2) pre-drilled holes per side. If the Uprights are equipped with factory holes, then skip to **Step 3**.
- Grille Guard Uprights without factory holes:**
 - a. Starting from the bottom of the center tube/panel, use a tape measure to measure a downward distance of approximately 2-3/8" (60mm). Mark a line on the upright to indicate the measured distance, **(Figure 1)**.
 - b. Place the driver/left Sensor Housing up over the marked line on the Grille Guard Upright. Line up the top mounting hole in the Housing with the reference line. With the front face on the Housing vertical, push the Bracket forward to the front of the upright. Mark through the (2) holes on the Housing and onto the Upright, **(Figure 2)**.
 - c. Use a 5/16" drill bit to drill through the (2) marked holes on the Upright.
 - d. Repeat the previous **Steps** to drill (2) holes on the passenger/right upright.
3. Starting from under the front bumper, locate and unplug the two center parking sensors, **(Figures 3 & 4)**. Remove the two sensors from the bumper. Also remove the outer sensor retainers from the bumper, **(Figure 5)**. **IMPORTANT:** Depending on model/year, the bumper may need to be removed the sensors. Reinstall bumper after removing center sensors.
4. Select (1) Wire Harness Extension and (2) Rubber Grommets, **(Figure 6)**. Slide the Grommets onto each end of the Wire Harness.
5. Insert the end of the driver/left side Harness Extension through the hole in the bumper and connect to sensor harness. Use (1) Rubber Grommet to seal the Wire Harness to the bumper, **(Figure 7)**. Repeat this **Step** to connect the passenger/right side Sensor harness.



1	Driver/left Sensor Housing	2	Sensor Retaining Caps
1	Passenger/right Sensor Housing	4	Rubber Grommets
1	Driver/left Housing Back Cover	2	55mm x 30mm x 2mm Adhesive Foam Strips
1	Passenger/right Housing Back Cover	8	6-1.00mm x 20mm Button Head Combo Bolts
2	Wire Harness Extensions	4	4mm x 15mm Self Tapping Screws
2	15.5mm x 25mm x 2mm Sealing Washers	1	4mm Wrench
2	20mm x 10mm Foam Spacers		

SENSOR RELOCATION KIT
2021-23 F-150 (INCL. F150 ECOBOOST / EXCL. ALL F150 RAPTOR MODELS, 20-22 DIESEL MODELS AND 22-23 F150
LIGHTNING EV) GG, XHDDG

INSTALLATION INSTRUCTIONS

SENSOR RELOCATION KIT

2021-23 F-150 (INCL. F150 ECOBOOST / EXCL. ALL F150 RAPTOR MODELS,
20-22 DIESEL MODELS AND 22-23 F150 LIGHTNING EV) GG, XHDDG

PART# 10447SRP